

Patent claims

1. An electromagnetic drive (1) for a switch, in particular in the medium-voltage sector, having at least one magnet body (2, 3) which delimits an air gap, a moving part (5) which is arranged in the air gap (4) and is guided such that it can move with respect to the magnet body (2, 3), at least one permanent magnet and at least one conductor (6) to which current can be supplied, the conductor(s) (6) extending at least partially in a magnetic flux produced by the permanent magnet(s) in the event of a movement of the moving part (5),

characterized in that

the moving part (5) is fixedly connected to at least one soft-magnetic latching body (7), and in that the magnetic flux produced by the permanent magnet(s) (3) passes through the latching body (7) in an end position of the moving part (5), the air gap (4) being bridged by the latching body (7) for the magnetic flux.

2. The electromagnetic drive (1) as claimed in claim 1, characterized in that

the moving part (5) has at least one coil (6) having a former, which has the conductor wound around it, each latching body being connected to one end of the coil (6).

3. The electromagnetic drive (1) as claimed in claim 1 or 2, characterized in that

the magnet body comprises the permanent magnet(s) (3) and a soft-magnetic yoke (2), the magnetic

flux produced by each permanent magnet (3) passing through the yoke (2).

4. The electromagnetic drive (1) as claimed in claim 3, characterized in that each latching body (7) bears against the soft-magnetic yoke (2) in the end position associated with said latching body (7).

5. The electromagnetic drive (1) as claimed in one of the preceding claims, characterized in that at least one spring (8) is provided for the purpose of releasing the moving part (5) from an end position.

6. The electromagnetic drive (1) as claimed in claim 1, characterized in that the moving part (5) is mounted on a shaft and can be rotated, and each latching body bears against stops, which are connected to the magnet body, in an end position of the moving part.

7. The electromagnetic drive as claimed in claim 6, characterized in that the moving part (5) is designed to be rotationally symmetrical, and the conductor is in the form of at least one winding on the moving part (5).